FIG.2A

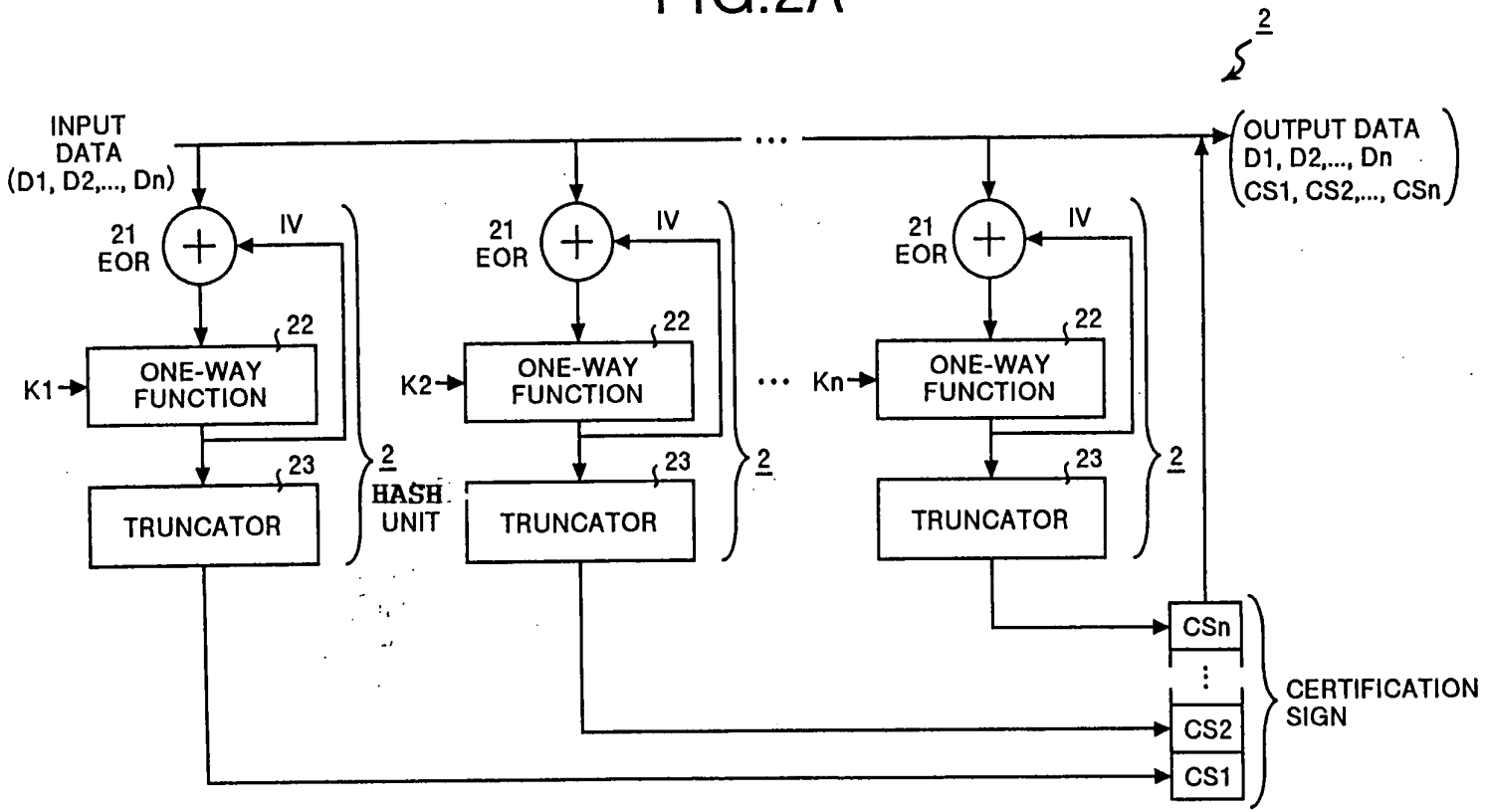

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FIG.2B

(b-1)CS1-GENERATING PROCESS
①→IV=PUBLIC CONSTANT
②→EK1[IV(+)D1]=L11
③→EK1[L11(+)D2]=L12
• • • • •
④→EK1[L1(n-1)(+)Dn]=L1n
⑤→Tr[L1n]=CS1

(b-2)CS2-GENERATING PROCESS
IV=PUBLIC CONSTANT
EK2[IV(+)D1]=L21
EK2[L21(+)D2]=L22
• • • • •
EK2[L2(n-1)(+)Dn]=L2n
Tr[L2n]=CS2

(b-3)CS3-GENERATING PROCESS
IV=PUBLIC CONSTANT
EK3[IV(+)D1]=L31
EK3[L31(+)D2]=L32
• • • • •
EK3[L3(n-1)(+)Dn]=L3n
Tr[L3n]=CS3

FIG.3A

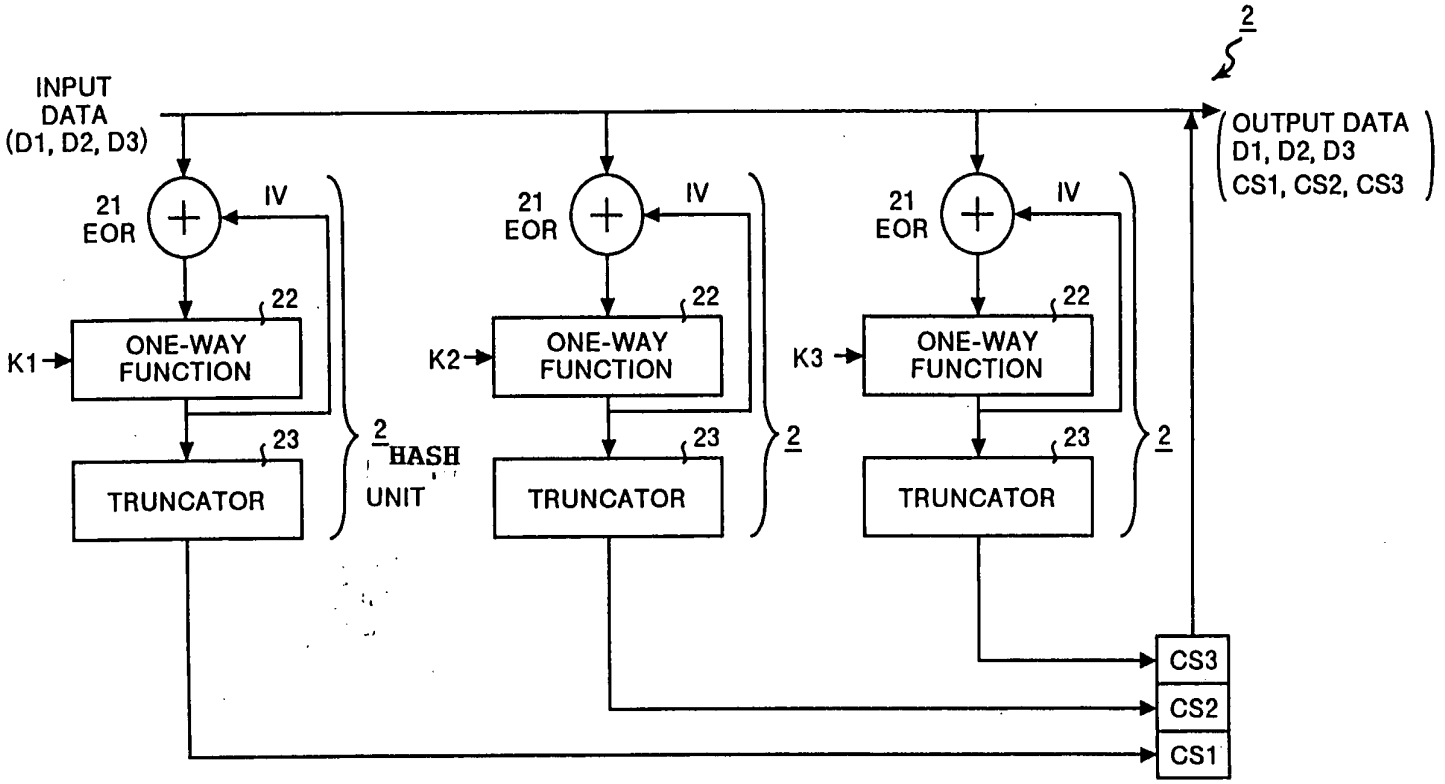

FIG.3B

(b-1)CS1-GENERATING PROCESS
①'→IV=PUBLIC CONSTANT
②'→EK1[IV(+)D1]=L11
③'→EK1[L11(+)D2]=L12
④'→EK1[L12(+)D3]=L13
⑤'→Tr[L13]=CS1

(b-2)CS2-GENERATING PROCESS
IV=PUBLIC CONSTANT
EK2[IV(+)D1]=L21
EK2[L21(+)D2]=L22
EK2[L22(+)D3]=L23
Tr[L23]=CS2

(b-3)CS3-GENERATING PROCESS
IV=PUBLIC CONSTANT
EK3[IV(+)D1]=L31
EK3[L31(+)D2]=L32
EK3[L32(+)D3]=L33
Tr[L33]=CS3